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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,081	02/27/2004	Thomas Ellinger	15111.0080	8803

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EXAMINER	
CROW, ROBERT THOMAS	
ART UNIT	PAPER NUMBER
1634	
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03/18/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No.	Applicant(s)	
	10/789,081	ELLINGER ET AL.	
	Examiner	Art Unit	
	Robert T. Crow	1634	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 February 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

a) ☒ The period for reply expires *4* months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: *None*.
   Claim(s) objected to: *None*.
   Claim(s) rejected: *1-25,52-58 and 62-86*.
   Claim(s) withdrawn from consideration: *None*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

/Ram R. Shukla/
Supervisory Patent Examiner, Art Unit 1634

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments filed 27 February 2009 (hereafter the "Remarks") have been fully considered but they are not persuasive for the reason(s) listed below.
A. Applicant argues on page 13 of the Remarks that Duck et al do not teach a probe array.
However, as noted in the previous rejection, Duck et al is not relied upon for the teaching of an array; i.e., two different probes on the array surface.

B. Applicant also argues on page 13 of the Remarks that Duck et al do not provide any teaching, suggestion, or motivation for having an array of different locations.

However, as noted above, Duck et al is not relied upon for the teaching of an array; i.e., two different probes on the array surface.

Further, it is noted that Duck et al clearly teach the molecules (i.e., more than one molecule) are immobilized on a solid support.

In addition, it is noted that it is the prior art of Koster et al that teaches a probe array comprising different sequences at different defined locations (Figure 3) in an ordered array (Figure 5) which has the added advantage of allowing multiple simultaneous detection of targets and parallel processing (column 4, lines 13-25). Thus, Koster et al teach the known technique of having multiple different sequences in an array and provide the motivation for making the modification as detailed in the previous Final Office Action.

It is also noted that the Supreme Court ruling for KSR Int'l Co. v. Teleflex, Inc (No 04-1350 (US 30 April 2007) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See Ex parte Smith (USPQ2d, slip op. at 20 (Bd. Pat. App. & Interf. June 25, 2007).

Finally, in response to applicant's arguments against the reference of Duck et al individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

B. Applicant argues on page 14 of the Remarks that the preferred supports are incompatible with successful multiplex detection of hybridization on a two-dimensional probe array.

However, it is noted that Duck et al teach the use of controlled pore glass and beads as substrates (column 6, lines 20-30), and Koster et al also teach controlled pore glass and beads as substrates, as well as specifically describing an array formed form bead placed into pits on flat wafers to form an array (column 12, lines 35-45).

In addition, MPEP 716.01(c) makes clear that "[t]he arguments of counsel cannot take the place of evidence in the record" (In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965)). Thus, Applicants arguments regarding lateral diffusion, surface, area, etc, on page 14 of the Remarks are merely arguments of counsel that cannot take the place of evidence in the record.

It is noted that the Response above should not be construed as an invitation to file an after final declaration. See MPEP 715.09 [R-3].

C. Applicant argues on page 14 of the Remark that the solid materials of Duck are understood to be bead like or spherical.

However, a full text-search review of Duck et al yields no recitation of "bead," "spherical," or "particles." While the Figures show round supports, it is noted that the courts have held that "[w]hen the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value" (Hockerson-Halberstadt, Inc. v. Avia Group Int 'l, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000)). A review of Duck et al yields no teaching of the scale of the drawings. Thus, Applicant's assertion that Duck is limited to beads or spheres is not convincing and the rejections are maintained. See MPEP 2125.

D. Applicant further states on page 14 of the Remarks that columns 7 and 8 of Duck et al each describe "separately recovering the immobilized molecules," which Applicant interprets as centrifugation of beads.

However, a full text-search review of Duck et al yields no recitation of "bead," "spherical," "particles," or centrifugation. Therefore, Applicant's assertions regarding centrifugation of beads are clearly in error.

E. Applicant argues on page 14 or the Remarks that column 9 of Duck et al states that large numbers of probe molecules are required, whereas the specification states that a probe array element includes just 109 molecules and indicated in "[t]e specification, at 89-90."

However, it is noted that the features upon which applicant relies (i.e., just 109 molecules) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993)

Further, neither paragraphs 0089-0090 nor pages 89-90 of the specification bear any statement whatsoever regarding "just 109 molecules."

F. Applicant argues on page 14 of the Remarks that there is no motivation to combine Duck et al with Koster et al. These arguments are addressed above in Section B.

G. Applicant argues on page 14 that Koster et al does not make use of cleavage products and that Koster uses mass spectrometry for detection.

However, Figure 7B of Koster et al clearly teaches the use of cleavage products. Further, Koster et al is not relied upon for the method of detection; rather, Koster et al is merely relied upon for the teaching of an array.

H. Applicant's arguments on page 15 of the Remarks rely n the alleged deficiencies of Duck et al in view of Koster et al, which are addressed above. Since the arguments regarding of Duck et al in view of Koster et al were not persuasive, remaining rejections are maintained.

I. Applicant argues on pages 15-16 of the Remarks that Koster et al do not teach a cleavage product and that Koster et al does not teach that at least one probe of the array does not bind to a target.

However, as noted in the previous Final Office Action, Koster et al are not relied upon for the teaching of cleavage products; Koster et al are merely relied upon for multiple different probes on the same array surface.

Rather, it is Monforte et al teach that the molecules are subjected to a cleavage step (column 8, lines 65-column 9, line 17); thus, the cleavable molecules are bound to a target and are in contact with a cleavage solution.

Thus, as detailed in the rejections presented in the previous Final Office Action, modification of the array of Monforte et al with the teachings of Koster et al results in an array having multiple different sequences, each having a cleavable bond. Because the array has multiple different sequences, not all of the immobilized sequences would bind a single target. Thus, when the solution is added but before cleavage has commenced, at least one probe is bound to the target, at least a second probe is not bound to a target, and both probes still have labels thereon because cleavage has yet to commence. Claim 62 is therefore obvious over the prior art.

J. Applicant argues on pages 16-17 of the Remarks that because a sample can include multiple target molecules, it does not necessarily guarantee that at least one probe on an array in not bound to a target.

However, Koster et al clearly teach multiple different sequences at different defined locations (Figure 3) in an ordered array (Figure 5). Koster et al teach "at least one detection site" (Figure 1B and column 5). The "at least one" clearly encompasses only one target site on the solid support. Therefore, in the case where an array is used, only one target site is present, and at least one other site is not bound to a target.

K. Applicant's arguments on page 17 of the Remarks rely on the alleged deficiencies of Monforte et al in view of Koster et al, which are addressed above. Since the arguments regarding of Monforte et al in view of Koster et al were not persuasive, remaining rejections are maintained.

/Robert T. Crow/
Examiner, Art Unit 1634.